



Annex C

Analysis categories and mortality data sources

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Table C1: Countries grouped by WHO region and income per capita, ^a 2004

WHO region	Income category ^b	WHO Member States
African Region	LMIC	Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mozambique, Namibia, Niger, Nigeria, Rwanda, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, South Africa, Swaziland, Togo, Uganda, United Republic of Tanzania, Zambia, Zimbabwe
Region of the Americas	High	Bahamas, Canada, United States of America
Region of the Americas	LMIC	Antigua and Barbuda, Argentina, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, Uruguay, Venezuela (Bolivarian Republic of)
Eastern Mediterranean Region	High	Bahrain, Kuwait, Qatar, Saudi Arabia, United Arab Emirates
Eastern Mediterranean Region	LMIC	Afghanistan, Djibouti, Egypt, Iran (Islamic Republic of), Iraq, Jordan, Lebanon, Libyan Arab Jamahiriya, Morocco, Oman, Pakistan, Somalia, Sudan, Syrian Arab Republic, Tunisia, Yemen
European Region	High	Andorra, Austria, Belgium, Cyprus, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Israel, Italy, Luxembourg, Malta, Monaco, Netherlands, Norway, Portugal, San Marino, Slovenia, Spain, Sweden, Switzerland, United Kingdom
European Region	LMIC	Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Georgia, Hungary, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Poland, Romania, Russian Federation, Serbia and Montenegro, Slovakia, Tajikistan, The former Yugoslav Republic of Macedonia, Turkey, Turkmenistan, Uzbekistan, Ukraine
South-East Asia Region	LMIC	Bangladesh, Bhutan, Democratic People's Republic of Korea, India, Indonesia, Maldives, Myanmar, Nepal, Sri Lanka, Thailand, Timor-Leste
Western Pacific Region	High	Australia, Brunei Darussalam, Japan, New Zealand, Republic of Korea, Singapore
Western Pacific Region	LMIC	Cambodia, China, Cook Islands, Fiji, Kiribati, Lao People's Democratic Republic, Malaysia, Marshall Islands, Micronesia (Federated States of), Mongolia, Nauru, Niue, Palau, Papua New Guinea, Philippines, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu, Viet Nam
Non-Member States or territories		American Samoa, Anguilla, Aruba, Bermuda, British Virgin Islands, Cayman Islands, Channel Islands, Faeroe Islands, Falkland Islands (Malvinas), French Guiana, French Polynesia, Gibraltar, Greenland, Guadeloupe, Guam, Holy See, Isle of Man, Liechtenstein, Martinique, Montserrat, Netherlands Antilles, New Caledonia, Northern Mariana Islands, Pitcairn, Puerto Rico, Réunion, Saint Helena, Saint Pierre et Miquelon, Tokelau, Turks and Caicos Islands, United States Virgin Islands, Wallis and Futuna Islands, West Bank and Gaza Strip, Western Sahara

LMIC, low- and middle-income countries.

^a WHO Member States are classified as high income if their 2004 gross national income per capita was US\$ 10 066 or more as estimated by the World Bank (159).

^b LMIC include those with 2004 gross national income per capita less than US\$ 10 066.

Table C2: Countries grouped by income per capita, ^a 2004

Income group	Countries included
High income	Andorra, Aruba, Australia, Austria, Bahamas, Bahrain, Belgium, Bermuda, Brunei Darussalam, Canada, Cayman Islands, Channel Islands, Cyprus, Denmark, Faeroe Islands, Finland, France, French Polynesia, Germany, Greece, Greenland, Guam, Iceland, Ireland, Isle of Man, Israel, Italy, Japan, Kuwait, Liechtenstein, Luxembourg, Malta, Monaco, Netherlands, Netherlands Antilles, New Caledonia, New Zealand, Norway, Portugal, Puerto Rico, Qatar, Republic of Korea, San Marino, Saudi Arabia, Singapore, Slovenia, Spain, Sweden, Switzerland, United Arab Emirates, United Kingdom, United States of America, United States, Virgin Islands
Upper middle income	American Samoa, Antigua and Barbuda, Argentina, Barbados, Belize, Botswana, Chile, Costa Rica, Croatia, Czech Republic, Dominica, Equatorial Guinea, Estonia, Gabon, Grenada, Hungary, Latvia, Lebanon, Libyan Arab Jamahiriya, Lithuania, Malaysia, Mauritius, Mexico, Northern Mariana Islands, Oman, Palau, Panama, Poland, Russian Federation, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Seychelles, Slovakia, South Africa, Trinidad and Tobago, Turkey, Uruguay, Venezuela (Bolivarian Republic of)
Lower middle income	Albania, Algeria, Angola, Armenia, Azerbaijan, Belarus, Bolivia, Bosnia and Herzegovina, Brazil, Bulgaria, Cape Verde, China, Colombia, Cuba, Djibouti, Dominican Republic, Ecuador, Egypt, El Salvador, Fiji, Georgia, Guatemala, Guyana, Honduras, Indonesia, Iran (Islamic Republic of), Iraq, Jamaica, Jordan, Kazakhstan, Kiribati, Maldives, Marshall Islands, Micronesia (Federated States of), Morocco, Namibia, Paraguay, Peru, Philippines, Romania, Samoa, Serbia and Montenegro, Sri Lanka, Suriname, Swaziland, Syrian Arab Republic, Thailand, The former Yugoslav Republic of Macedonia, Tonga, Tunisia, Turkmenistan, Ukraine, Vanuatu, West Bank and Gaza Strip
Low income	Afghanistan, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, Cameroon, Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, Democratic People's Republic of Korea, Democratic Republic of the Congo, Eritrea, Ethiopia, Gambia, Ghana, Guinea, Guinea-Bissau, Haiti, India, Kenya, Kyrgyzstan, Lao People's Democratic Republic, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Moldova, Mongolia, Mozambique, Myanmar, Nepal, Nicaragua, Niger, Nigeria, Pakistan, Papua New Guinea, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Solomon Islands, Somalia, Sudan, Tajikistan, Timor-Leste, Togo, Uganda, United Republic of Tanzania, Uzbekistan, Viet Nam, Yemen, Zambia, Zimbabwe
Not included	Anguilla, British Virgin Islands, Cook Islands, Falkland Islands (Malvinas), French Guiana, Gibraltar, Guadeloupe, Holy See, Martinique, Montserrat, Nauru, Niue, Pitcairn, Réunion, Saint Helena, Saint Pierre et Miquelon, Tokelau, Turks and Caicos Islands, Tuvalu, Wallis and Futuna Islands, Western Sahara

^a Income categories for 2004 as defined by the World Bank (159). Countries are divided among income groups according to 2004 gross national income (GNI) per capita. The groups are low income (US\$825 or less), lower middle income (US\$826–3255), upper middle income (US\$3256–10 065), and high income (US\$10 066 or more). Note that these income groups differ slightly from those used in the Disease Control Priorities Project (based on GNI in 2001) (9).

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References

Table C3: GBD cause categories and ICD codes

GBD cause name	ICD-10 code
I. Communicable, maternal, perinatal and nutritional conditions^a	A00-B99, G00-G04, N70-N73, J00-J06, J10-J18, J20-J22, H65-H66, 000-099, P00-P96, E00-E02, E40-E46, E50, D50-D53, D64.9, E51-64
A. Infectious and parasitic diseases	A00-B99, G00, G03-G04, N70-N73
1. Tuberculosis	A15-A19, B90
2. Sexually transmitted diseases excluding HIV	A50-A64, N70-N73
a. Syphilis	A50-A53
b. Chlamydia	A55-A56
c. Gonorrhoea	A54
Other STDs	A57-A64, N70-N73
3. HIV/AIDS	B20-B24
4. Diarrhoeal diseases	A00, A01, A03, A04, A06-A09
5. Childhood-cluster diseases	A33-A37, A80, B05, B91
a. Pertussis	A37
b. Poliomyelitis	A80, B91
c. Diphtheria	A36
d. Measles	B05
e. Tetanus	A33-A35
6. Meningitis	A39, G00, G03
7. Hepatitis B	B16-B19 (minus B17.1, B18.2)
Hepatitis C	B17.1, B18.2
8. Malaria	B50-B54
9. Tropical-cluster diseases	B55-B57, B65, B73, B74.0-B74.2
a. Trypanosomiasis	B56
b. Chagas disease	B57
c. Schistosomiasis	B65
d. Leishmaniasis	B55
e. Lymphatic filariasis	B74.0-B74.2
f. Onchocerciasis	B73
10. Leprosy	A30
11. Dengue	A90-A91
12. Japanese encephalitis	A83.0
13. Trachoma	A71
14. Intestinal nematode infections	B76-B81
a. Ascariasis	B77
b. Trichuriasis	B79
c. Hookworm disease	B76
(ancylostomiasis and necatoriasis)	
Other intestinal infections	B78, B80, B81
Other infectious diseases	A02, A05, A20-A28, A31, A32, A38, A40-A49, A65-A70, A74-A79, A81, A82, A83.1-A83.9, A84-A89, A92-A99, B00-B04, B06-B15, B25-B49, B58-B60, B64, B66-B72, B74.3-B74.9, B75, B82-B89, B92-B99, G04
B. Respiratory infections	J00-J06, J10-J18, J20-J22, H65-H66
1. Lower respiratory infections	J10-J18, J20-J22
2. Upper respiratory infections	J00-J06
3. Otitis media	H65-H66
C. Maternal conditions	000-099
1. Maternal haemorrhage	044-046, 067, 072
2. Maternal sepsis	085-086
3. Hypertensive disorders of pregnancy	010-016
4. Obstructed labour	064-066
5. Abortion	000-007
Other maternal conditions	020-043, 047-063, 068-071, 073-075, 087-099

GBD cause name	ICD-10 code
D. Conditions arising during the perinatal period	P00-P96
1. Prematurity and low birth weight	P05, P07, P22, P27-P28
2. Birth asphyxia and birth trauma	P03, P10-P15, P20-P21, P24-P26, P29
Neonatal infections and other conditions	P00-P02, P04, P08, P23, P35-P96
E. Nutritional deficiencies	E00-E02, E40-E46, E50, D50-D53, D64.9, E51-E64
1. Protein-energy malnutrition	E40-E46
2. Iodine deficiency	E00-E02
3. Vitamin A deficiency	E50
4. Iron-deficiency anaemia	D50, D64.9
Other nutritional disorders	D51-D53, E51-E64
II. Noncommunicable diseases^a	C00-C97, D00-D48, D55-D64 (minus D 64.9), D65-D89, E03-E07, E10-E16, E20-E34, E65-E88, F01-F99, G06-G98, H00-H61, H68-H93, I00-I99, J30-J98, K00-K92, N00-N64, N75-N98, L00-L98, M00-M99, Q00-Q99
A. Malignant neoplasms	C00-C97
1. Mouth and oropharynx cancers ^b	C00-C14
2. Oesophagus cancer ^b	C15
3. Stomach cancer ^b	C16
4. Colon and rectum cancers ^b	C18-C21
5. Liver cancer	C22
6. Pancreas cancer	C25
7. Trachea, bronchus and lung cancers	C33-C34
8. Melanoma and other skin cancers ^b	C43-C44
9. Breast cancer ^b	C50
10. Cervix uteri cancer ^b	C53
11. Corpus uteri cancer ^b	C54-C55
12. Ovary cancer	C56
13. Prostate cancer ^b	C61
14. Bladder cancer ^b	C67
15. Lymphomas and multiple myeloma ^b	C81-C90, C96
16. Leukaemia ^b	C91-C95
Other malignant neoplasms ^b	C17, C23, C24, C26-C32, C37-C41, C45-C49, C51, C52, C57-C60, C62-C66, C68-C80, C97
B. Other neoplasms	D00-D48
C. Diabetes mellitus	E10-E14
D. Endocrine disorders	D55-D64 (minus D64.9), D65-D89, E03-E07, E15-E16, E20-E34, E65-E88
E. Neuropsychiatric conditions	F01-F99, G06-G98
1. Unipolar depressive disorders	F32-F33
2. Bipolar affective disorder	F30-F31
3. Schizophrenia	F20-F29
4. Epilepsy	G40-G41
5. Alcohol use disorders	F10
6. Alzheimer and other dementias	F01, F03, G30-G31
7. Parkinson disease	G20-G21
8. Multiple sclerosis	G35
9. Drug use disorders	F11-F16, F18-F19
10. Post-traumatic stress disorder	F43.1
11. Obsessive-compulsive disorder	F42
12. Panic disorder	F40.0, F41.0
13. Insomnia (primary)	F51
14. Migraine	G43
Mental retardation attributable to lead exposure	F70-F79
Other neuropsychiatric disorders	F04-F09, F17, F34-F39, F401-F409, F411-F419, F43(minus F43.1), F44-F50, F52-F69, F80-F99, G06-G12, G23-G25, G36, G37, G44-G98

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References

(Table C3 continued)

GBD cause name	ICD-10 code
F. Sense organ diseases	H00-H61, H68-H93
1. Glaucoma	H40
2. Cataracts	H25-H26
3. Refractive errors	H524
4. Hearing loss, adult onset	H90-H91
Macular degeneration and other	H00-H21, H27-H35, H43-H61(minus H524), H68-H83, H92-H93
G. Cardiovascular diseases	I00-I99
1. Rheumatic heart disease	I01-I09
2. Hypertensive heart disease	I10-I13
3. Ischaemic heart disease ^c	I20-I25
4. Cerebrovascular disease	I60-I69
5. Inflammatory heart diseases	I30-I33, I38, I40, I42
Other cardiovascular diseases ^c	I00, I26-I28, I34-I37, I44-I51, I70-I99
H. Respiratory diseases	J30-J98
1. Chronic obstructive pulmonary disease	J40-J44
2. Asthma	J45-J46
Other respiratory diseases	J30-J39, J47-J98
I. Digestive diseases	K20-K92
1. Peptic ulcer disease	K25-K27
2. Cirrhosis of the liver	K70, K74
3. Appendicitis	K35-K37
Other digestive diseases	K20-K22, K28-K31, K38, K40-K66, K71-K73, K75-K92
J. Genitourinary diseases	N00-N64, N75-N98
1. Nephritis and nephrosis	N00-N19
2. Benign prostatic hypertrophy	N40
Other genitourinary system diseases	N20-N39, N41-N64, N75-N98
K. Skin diseases	L00-L98
L. Musculoskeletal diseases	M00-M99
1. Rheumatoid arthritis	M05-M06
2. Osteoarthritis	M15-M19
3. Gout	M10
4. Low back pain	M45-M48, M54 (minus M54.2)
Other musculoskeletal disorders	M00-M02, M08, M11-M13, M20-M43, M50-M53, M54.2, M55-M99
M. Congenital anomalies	Q00-Q99
1. Abdominal wall defect	Q79.2-Q79.5
2. Anencephaly	Q00
3. Anorectal atresia	Q42
4. Cleft lip	Q36
5. Cleft palate	Q35, Q37
6. Oesophageal atresia	Q39.0-Q39.1
7. Renal agenesis	Q60
8. Down syndrome	Q90
9. Congenital heart anomalies	Q20-Q28
10. Spina bifida	Q05
Other congenital anomalies	Q01-Q04, Q06-Q18, Q30-Q34, Q38, Q392-Q399, Q40-Q41, Q43-Q56, Q61-Q78, Q790, Q791, Q796, Q798, Q799, Q80-Q89, Q91-Q99

GBD cause name	ICD-10 code
N. Oral conditions	K00-K14
1. Dental caries	K02
2. Periodontal disease	K05
3. Edentulism	—
Other oral diseases	K00, K01, K03, K04, K06-K14
III. Injuries	V01-Y89
A. Unintentional injuries^d	V01-X59, Y40-Y86, Y88, Y89
1. Road traffic accidents ^e	
2. Poisonings	X40-X49
3. Falls	W00-W19
4. Fires	X00-X09
5. Drownings	W65-W74
6. Other unintentional injuries	Rest of V, W20-W64, W75-W99, X10-X39, X50-X59, Y40-Y86, Y88, Y89
B. Intentional injuries^d	X60-Y09, Y35-Y36, Y870, Y871
1. Self-inflicted injuries	X60-X84, Y870
2. Violence	X85-Y09, Y871
3. War and conflict	Y36
Other intentional injuries	Y35

—, not available; STD, sexually transmitted diseases.

^a Deaths coded to “Symptoms, signs and ill-defined conditions” (780-799 in ICD-9 and R00-R99 in ICD-10) are distributed proportionately to all causes within Group I and Group II.

^b Cancer deaths coded to ICD categories for malignant neoplasms of other and unspecified sites including those whose point of origin cannot be determined, and secondary and unspecified neoplasms (ICD-10 C76, C80, C97 or ICD-9 195, 199) were redistributed pro-rata across the footnoted malignant neoplasm categories within each age–sex group, so that the category “Other malignant neoplasms” includes only malignant neoplasms of other specified sites (94).

^c Ischaemic heart disease deaths may be miscoded to a number of so-called cardiovascular “garbage” codes. These include heart failure, ventricular dysrhythmias, generalized atherosclerosis and ill-defined descriptions and complications of heart disease. Proportions of deaths coded to these causes were redistributed to ischaemic heart disease as described in (23). Relevant ICD-9 codes are 427.1, 427.4, 427.5, 428, 429.0, 429.1, 429.2, 429.9, 440.9, and relevant ICD-10 codes are I47.2, I49.0, I46, I50, I51.4, I51.5, I51.6, I51.9 and I70.9.

^d Injury deaths where the intent is not determined (E980-989 of ICD-9 and Y10-Y34, Y872 in ICD-10) are distributed proportionately to all causes below the group level for injuries.

^e For countries with 3-digit ICD10 data, for “Road traffic accidents” use: V01-V04, V06, V09-V80, V87, V89 and V99.

For countries with 4-digit ICD10 data, for “Road traffic accidents” use:

V01.1-V01.9, V02.1-V02.9, V03.1-V03.9, V04.1-V04.9, V06.1-V06.9, V09.2, V09.3, V10.3-V10.9, V11.3-V11.9, V12.3-V12.9, V13.3-V13.9, V14.3-V14.9, V15.4-V15.9, V16.4-V16.9, V17.4-V17.9, V18.4-V18.9, V19.4-V19.9, V20.3-V20.9, V21.3-V21.9, V22.3-V22.9, V23.3-V23.9, V24.3-V24.9, V25.3-V25.9, V26.3-V26.9, V27.3-V27.9, V28.3-V28.9, V29.4-V29.9, V30.4-V30.9, V31.4-V31.9, V32.4-V32.9, V33.4-V33.9, V34.4-V34.9, V35.4-V35.9, V36.4-V36.9, V37.4-V37.9, V38.4-V38.9, V39.4-V39.9, V40.4-V40.9, V41.4-V41.9, V42.4-V42.9, V43.4-V43.9, V44.4-V44.9, V45.4-V45.9, V46.4-V46.9, V47.4-V47.9, V48.4-V48.9, V49.4-V49.9, V50.4-V50.9, V51.4-V51.9, V52.4-V52.9, V53.4-V53.9, V54.4-V54.9, V55.4-V55.9, V56.4-V56.9, V57.4-V57.9, V58.4-V58.9, V59.4-V59.9, V60.4-V60.9, V61.4-V61.9, V62.4-V62.9, V63.4-V63.9, V64.4-V64.9, V65.4-V65.9, V66.4-V66.9, V67.4-V67.9, V68.4-V68.9, V69.4-V69.9, V70.4-V70.9, V71.4-V71.9, V72.4-V72.9, V73.4-V73.9, V74.4-V74.9, V75.4-V75.9, V76.4-V76.9, V77.4-V77.9, V78.4-V78.9, V79.4-V79.9, V80.3-V80.5, V81.1, V82.1, V82.8-V82.9, V83.0-V83.3, V84.0-V84.3, V85.0-V85.3, V86.0-V86.3, V87.0-V87.9, V89.2-V89.3, V89.9, V99 and Y850.

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Annex A

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Annex C

References

Table C4: Data sources and methods for estimation of mortality by cause, age and sex

Country	Vital registration data used (year)	Estimated coverage (%)	Other sources of information	Method	Cause-of-death distribution pattern used
Afghanistan			a	CodMod	Egypt 2000, Iran (Islamic Republic of) 2001
Albania	2004	50–74	a	CodMod	Vital registration
Algeria			a	CodMod	AfrD distribution ^c
Andorra			b	Based on 2000 data for selected provinces of Spain	GBD2002 cause-of-death estimates
Angola			a	CodMod	AfrD distribution ^c
Antigua and Barbuda	2000–2002	50–74	b	Vital registration	Vital registration
Argentina	2004	90–100	b	Vital registration	Vital registration
Armenia	2003	50–74	a	CodMod	Vital registration
Australia	2003	90–100	b	Vital registration	Vital registration
Austria	2004	90–100	b	Vital registration	Vital registration
Azerbaijan	2002	50–74	a	CodMod	Vital registration
Bahamas	1999–2000	90–100	b	Vital registration	Vital registration
Bahrain	2000–2001	90–100	b	Vital registration	Vital registration
Bangladesh			a	CodMod	India, Philippines
Barbados	2000–2001	75–89	b	Vital registration	Vital registration
Belarus	2003	90–100	b	Vital registration	Vital registration
Belgium	1997	90–100	b	Vital registration	Vital registration
Belize	1999–2001	90–100	b	Vital registration	Vital registration
Benin			a	CodMod	AfrD distribution ^c
Bhutan			a	CodMod	India
Bolivia			a	CodMod	Peru 2000
Bosnia and Herzegovina	1999	75–89	b	Vital registration	Vital registration
Botswana			a	CodMod	AfrE distribution ^c
Brazil	2004	75–89	a	CodMod	Vital registration
Brunei Darussalam	1998–2000	90–100	b	Vital registration	GBD2002 cause-of-death estimates
Bulgaria	2004	90–100	b	Vital registration	Vital registration
Burkina Faso			a	CodMod	AfrD distribution ^c
Burundi			a	CodMod	AfrE distribution ^c
Cambodia			a	CodMod	Philippines, Thailand
Cameroon			a	CodMod	AfrD distribution ^c
Canada	2003	90–100	b	Vital registration	Vital registration
Cape Verde			a	CodMod	AfrD distribution ^c
Central African Republic			a	CodMod	AfrE distribution ^c
Chad			a	CodMod	AfrD distribution ^c
Chile	2004	90–100	b	Vital registration	Vital registration
China	2005		DSP, a	Combination of DSP and vital registration weighted	Vital registration and DSP
Colombia	2004	75–89	a	CodMod	Vital registration
Comoros			a	CodMod	AfrD distribution ^c
Congo			a	CodMod	AfrE distribution ^c
Cook Islands	1999–2001	90–100	a	Vital registration	GBD2002 cause-of-death estimates
Costa Rica	2004	75–89	b	Vital registration	Vital registration

Country	Vital registration data used (year)	Estimated coverage (%)	Other sources of information	Method	Cause-of-death distribution pattern used
Côte d'Ivoire			Deaths assessed by medical personnel in city hospitals 1973-1992 (160); a	CodMod	AfrE distribution ^c
Croatia	2004	90-100	b	Vital registration	Vital registration
Cuba	2004	90-100	b	Vital registration	Vital registration
Cyprus	1997-99	50-74	a	CodMod	GBD2002 cause-of-death estimates
Czech Republic	2004	90-100	b	Vital registration	Vital registration
Democratic People's Republic of Korea			a	CodMod	India, Philippines
Democratic Republic of the Congo			a	CodMod	AfrE distribution ^c
Denmark	2001	90-100	b	Vital registration	Vital registration
Djibouti			a	CodMod	Egypt 2000, Iran (Islamic Republic of) 2000
Dominica	2001-2003	90-100	b	Vital registration	Vital registration
Dominican Republic	2004	<50	a	CodMod	Vital registration
Ecuador	2004	75-89	a	CodMod	Vital registration
Egypt	2000	75-89	a	CodMod	Vital registration
El Salvador	2004	75-89	a	CodMod	Vital registration
Equatorial Guinea			a	CodMod	AfrD distribution ^c
Eritrea			a	CodMod	AfrE distribution ^c
Estonia	2004	90-100	b	Vital registration	Vital registration
Ethiopia			a	CodMod	AfrE distribution ^c
Fiji	2000	90-100	a	Vital registration	Vital registration
Finland	2004	90-100	b	Vital registration	Vital registration
France	2004	90-100	b	Vital registration	Vital registration
Gabon			a	CodMod	AfrD distribution ^c
Gambia			a	CodMod	AfrD distribution ^c
Georgia	2001	90-100	a	CodMod	Vital registration
Germany	2004	90-100	b	Vital registration	Vital registration
Ghana			Mortality data from hospitals in 20 selected districts and 9 regional hospitals in 2003; a	CodMod	AfrD distribution ^c
Greece	2004	90-100	b	Vital registration	Vital registration
Grenada	1994-1996	75-89	b	Vital registration	GBD2002 cause-of-death estimates
Guatemala	2004	90-100	a	CodMod	Vital registration
Guinea			a	CodMod	AfrD distribution ^c
Guinea-Bissau			a	CodMod	AfrD distribution ^c
Guyana	2001-2003	50-74	b	Vital registration	Vital registration
Haiti	2003	<50	a	CodMod	Vital registration
Honduras			a	CodMod	El Salvador, Guatemala, Nicaragua
Hungary	2004	90-100	b	Vital registration	Vital registration
Iceland	2002-2004	90-100	b	Vital registration	Vital registration

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Annex A

Annex B

Annex C

References

(Table C4 continued)

Country	Vital registration data used (year)	Estimated coverage (%)	Other sources of information	Method	Cause-of-death distribution pattern used
India	1995–1998		a	Proportionate mortality for urban and rural summed up to national estimate	1996 – 1998 (Survey of Cause of Death (rural)), Urban Medical certification of Cause of Death System – 1995
Indonesia			a	CodMod	India, Philippines, Singapore, Thailand
Iran (Islamic Republic of)	2004–2005	50–74	a	CodMod	Vital registration
Iraq			a	CodMod	Egypt 2000, Iran (Islamic Republic of) 2001
Ireland	2004	90–100	b	Vital registration	Vital registration
Israel	2004	90–100	b	Vital registration	Vital registration
Italy	2002	90–100	b	Vital registration	Vital registration
Jamaica	1991	50–74	a	CodMod	Vital registration data for Jamaica and Colombia
Japan	2004	90–100	b	Vital registration	Vital registration
Jordan	2003–2004	<50	Verbal autopsy data for 1995/96 (161); a	CodMod	Vital registration
Kazakhstan	2004	75–89	a	CodMod	Vital registration
Kenya			Hospital data, Ministry of Health, 1996, 1998–2000; a	CodMod	AfrE distribution ^c
Kiribati	2000–2002	75–89	Source: (162); a	Vital registration	GBD2002 cause-of-death estimates
Kuwait	2000–2002	90–100	b	Vital registration	Vital registration
Kyrgyzstan	2004	50–74	a	CodMod	Vital registration
Lao People's Democratic Republic			a	CodMod	Philippines, Thailand
Latvia	2004	90–100	b	Vital registration	Vital registration
Lebanon			a	CodMod	Egypt 2000, Iran (Islamic Republic of) 2001
Lesotho			a	CodMod	AfrE distribution ^c
Liberia			a	CodMod	AfrD distribution ^c
Libyan Arab Jamahiriya			a	CodMod	Egypt 2000, Iran (Islamic Republic of) 2001
Lithuania	2004	90–100	b	Vital registration	Vital registration
Luxembourg	2002–2004	90–100	b	Vital registration	Vital registration
Madagascar			a	CodMod	AfrD distribution ^c
Malawi			a	CodMod	AfrE distribution ^c
Malaysia			a	CodMod	China, Singapore, Thailand
Maldives			a	CodMod	India, Philippines
Mali			a	CodMod	AfrD distribution ^c
Malta	2002–2004	90–100	b	Vital registration	Vital registration
Marshall Islands			a	Regional pattern	GBD2002 cause-of-death estimates
Mauritania			a	CodMod	AfrD distribution ^c
Mauritius	2002–2004	90–100	b	Vital registration	Vital registration
Mexico	2004	90–100	Harvard Initiative for Global Health analyses of cause-of-death in Mexico; b	Vital registration	Vital registration

Country	Vital registration data used (year)	Estimated coverage (%)	Other sources of information	Method	Cause-of-death distribution pattern used
Micronesia (Federated States of)			1999 FSM Statistical Yearbook; a	Regional pattern	GBD2002 cause-of-death estimates
Moldova	2004	75–89	b	Vital registration	Vital registration
Monaco			b	Based on 1998 data from Provence Alpes Côte d'Azur, Department of France	GBD2002 cause-of-death estimates
Mongolia	2003	75–89	a	CodMod	Vital registration
Morocco			a	CodMod	Egypt 2000, Iran (Islamic Republic of) 2001
Mozambique			a	CodMod	AfrE distribution ^c
Myanmar			a	CodMod	India, Philippines
Namibia			a	CodMod	AfrE distribution ^c
Nauru	1994–96	<50	Mortality decline in Nauru. Source: R Taylor & K Thoma, unpublished data, 1998; a	Vital registration	GBD2002 cause-of-death estimates
Nepal			a	CodMod	India, Philippines
Netherlands	2004	90–100	b	Vital registration	Vital registration
New Zealand	2003	90–100	b	Vital registration	Vital registration
Nicaragua	2004	50–74	a	CodMod	Vital registration
Niger			a	CodMod	AfrD distribution ^c
Nigeria			a	CodMod	AfrD distribution ^c
Niue	1998–2000	90–100	a	Vital registration	GBD2002 cause-of-death estimates
Norway	2004	90–100	b	Vital registration	Vital registration
Oman			a	CodMod	Bahrain and Kuwait, 1997–2001
Pakistan			a	CodMod	India
Palau			a	Regional pattern	GBD2002 cause-of-death estimates
Panama	2004	90–100	a	CodMod	Vital registration
Papua New Guinea			a	CodMod	India, Philippines
Paraguay	2004	50–74	a	CodMod	Vital registration
Peru	2000	50–74	a	CodMod	Vital registration
Philippines	1998	75–89	a	CodMod	Vital registration
Poland	2004	90–100	b	Vital registration	Vital registration
Portugal	2004	90–100	b	Vital registration	Vital registration
Qatar	2001	75–89	a	CodMod	GBD2002 cause-of-death estimates
Republic of Korea	2004	75–89	b	Vital registration	Vital registration
Romania	2004	90–100	b	Vital registration	Vital registration
Russian Federation	2004	90–100	b	Vital registration	Vital registration
Rwanda			a	CodMod	AfrE distribution ^c
Saint Kitts and Nevis	1993–95	90–100	b	Vital registration	GBD2002 cause-of-death estimates
Saint Lucia	2000–2002	90–100	b	Vital registration	Vital registration
Saint Vincent and the Grenadines	2001–2003	90–100	b	Vital registration	Vital registration

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Annex A

Annex B

Annex C

References

(Table C4 continued)

Country	Vital registration data used (year)	Estimated coverage (%)	Other sources of information	Method	Cause-of-death distribution pattern used
Samoa			DHS 1999 and 2000 (163–164); a	Regional pattern	GBD2002 cause-of-death estimates
San Marino	1998–2000	75–89	b	Vital registration	GBD2002 cause-of-death estimates
Sao Tome and Principe			a	CodMod	GBD2002 cause-of-death estimates
Saudi Arabia			a	CodMod	Bahrain and Kuwait, 1997–2001
Senegal			Niakhar, Senegal, deaths assessed by verbal autopsy data for Niakhar 1983–1990 (165); a	CodMod	AfrD distribution ^c
Serbia and Montenegro	2002	90–100	b	Vital registration	Vital registration
Seychelles	1998–2000	90–100	b	Vital registration	GBD2002 cause-of-death estimates
Sierra Leone			a	CodMod	AfrD distribution ^c
Singapore	2003	75–89	b	Vital registration	Vital registration
Slovakia	2004	90–100	b	Vital registration	Vital registration
Slovenia	2004	90–100	b	Vital registration	Vital registration
Solomon Islands			a	Regional pattern	Cook Islands, Fiji, Kiribati, Nauru, Marshall Islands, Niue, Samoa, Tonga, Tuvalu, Vanuatu
Somalia			a	CodMod	Egypt 2000, South Africa 2004, Zimbabwe National Burden of Disease Study 1997, Mozambique Maputo Central Hospital Mortuary 1993–2004
South Africa	2004	75–89	National burden of disease estimates for 2000 (42); a	Vital registration	Vital registration
Spain	2004	90–100	b	Vital registration	Vital registration
Sri Lanka	1996	50–74	a	CodMod	Vital registration
Sudan			a	CodMod	Egypt 2000, South Africa 2004, Zimbabwe National Burden of Disease Study 1997, Mozambique Maputo Central Hospital Mortuary 1993–2004
Suriname	1998–2000	50–74	b	Vital registration	Vital registration
Swaziland			a	CodMod	AfrE distribution ^c
Sweden	2004	90–100	b	Vital registration	Vital registration
Switzerland	2004	90–100	b	Vital registration	Vital registration
Syrian Arab Republic	2000	90–100	a	CodMod	Vital registration
Tajikistan	2004	50–74	a	CodMod	Vital registration
Thailand	2002	75–89	Ministry of Health – verbal autopsy study; a	Vital registration corrected by verbal autopsy study	Vital registration corrected by verbal autopsy study
The former Yugoslav Republic of Macedonia	2003	90–100	b	Vital registration	Vital registration
Timor-Leste			a	CodMod	India, Philippines
Togo			a	CodMod	AfrD distribution ^c

Country	Vital registration data used (year)	Estimated coverage (%)	Other sources of information	Method	Cause-of-death distribution pattern used
Tonga	1998	50–74	Report of the Minister of Health for the year 1994 (166); a	Vital registration	GBD2002 cause-of-death estimates
Trinidad and Tobago	1999–2000	75–89	b	Vital registration	Vital registration
Tunisia			a	CodMod	Egypt 2000, Iran (Islamic Republic of) 2001
Turkey	2003	<50	a	CodMod	Turkey National Burden of Disease Study 2000
Turkmenistan	1998	75–89	a	CodMod	Vital registration
Tuvalu			a	Regional pattern	GBD2002 cause-of-death estimates
Uganda			a	CodMod	AfrE distribution ^c
Ukraine	2004	90–100	b	Vital registration	Vital registration
United Arab Emirates			a	CodMod	Bahrain and Kuwait, 1997–2001
United Kingdom	2004	90–100	b	Vital registration	Vital registration
United Republic of Tanzania			a	CodMod	AfrE distribution ^c
United States of America	2004	90–100	b	Vital registration	Vital registration
Uruguay	2004	90–100	b	Vital registration	Vital registration
Uzbekistan	2004	50–74	a	CodMod	Vital registration
Vanuatu			Hospital data, Ministry of Health, 2001; a	Regional pattern	GBD2002 cause-of-death estimates
Venezuela (Bolivarian Republic of)	2004	90–100	b	Vital registration	Vital registration
Viet Nam			a	CodMod	China, India, Thailand
Yemen			a	CodMod	Egypt 2000, Iran (Islamic Republic of) 2001
Zambia			a	CodMod	AfrE distribution ^c
Zimbabwe			a	CodMod	AfrE distribution ^c

CodMod, GBD cause-of-death model; DHS, Demographic and Health Survey; DSP, disease surveillance point system.

^a Epidemiological estimates obtained from studies, WHO technical programmes and UNAIDS for the following conditions: AIDS, TB, diphtheria, measles, pertussis, poliomyelitis, tetanus, dengue, malaria, schistosomiasis, trypanosomiasis, Japanese encephalitis, Chagas, maternal conditions (including abortion), cancers, drug use disorders, rheumatoid arthritis and war.

^b Epidemiological estimates based on studies, information from WHO technical programmes and UNAIDS for the following conditions: AIDS, drug use disorders and war where applicable.

^c South African death registration data 2004, Zimbabwe National Burden of Disease Study 1997 (32), INDEPTH verbal autopsy data from 7 sites in Africa 1999–2002 (33), Antananarivo Madagascar 1976–1995 (34), Mozambique Maputo Central Hospital Mortuary 1993–2004 (35).

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Annex A

Annex B

Annex C

References

